

REMARKS

In the Office Action of September 1, 2004, claims 1-20 were rejected under § 103(a) as being unpatentable over Frank Patent No. 3,992,182 or over *Frank* in view of various secondary references.

Claims 9-20 were also rejected under § 112 for being indefinite for the reason that the preambles of such claims referred to features which were not required in the claim bodies. Pursuant to the above amendments, claims 9-20 have been amended to delete the objectionable features from the preambles and thus overcome the § 112 rejection.

The Frank reference and the various secondary references have been carefully reviewed and amendments have been made to the claims to more clearly define the present invention and to more clearly distinguish the claims from the prior art. Reconsideration of the rejection of the claims is respectfully requested in view of the above amendments and the following comments.

The Frank Patent No. 3,992,182 relates to a system for conveying glass sheets through a sheet treatment apparatus. During the passage of the glass sheets through the treatment apparatus, the sheets are conveyed on a first set of rollers 24 through a furnace at a first, slower speed and then, following the furnace treatment, are conveyed on a second set of rollers 25 through a cooling station at a second, faster speed. The main feature of the invention of *Frank* is the provision of a mechanism for transferring the glass sheets from the slower moving furnace rollers to the faster moving cooling rollers so that such transfer can be made as quickly as possible. The Frank patent accomplishes this by positioning three sub-series of rollers 271, 272 and 273 between the rollers 24 (rotating at a slower speed) and the second rollers (rotating at a faster speed). These sub-series of rollers 271, 272 and 273 are independently controlled through various motors, belts and clutches so that they either rotate at the slower speed of the rollers 24 or the faster speed of the rollers 25.

As the leading edge of a glass sheet reaches the electric eye 38, a cycle is initiated so that when that sheet is positioned on all three of the sub-series rollers 271, 272 and 273, all three will increase in speed simultaneously to the faster speed of the rollers 25. Then, as the trailing edge of the glass sheet passes each of the sub-series rollers 271, 272 and 273, the speed of such rollers is sequentially reduced to the slower speed of the rollers 24. This increases the overall speed at which the sheet of glass can be transferred from the slower rollers 24 to the faster rollers 25.

As disclosed in *Frank*, the transfer sub-series rollers 271, 272 and 273 are designed so that acceleration of such rollers from the slower speed to the faster speed is done simultaneously when only a single glass sheet is positioned thereon. Then, as the trailing edge of the glass pane leaves each of the sub-series rollers, that particular set of rollers is reduced in speed so that it can begin receiving a following sheet of glass, thereby increasing the overall throughput of the system. The bottom line, however, is that acceleration of the three sets of sub-series rollers occurs simultaneously and only when a single glass sheet is positioned on such rollers.

In contrast, the transfer mechanism in accordance with the present invention contemplates dispensing a plurality of blanks onto a first conveyor which is traveling at a first velocity and then accelerating the first conveyor to a second faster velocity with the plurality of blanks positioned thereon. One of the main objectives of the present invention is to transfer blanks from a slower moving first conveyor in which the blanks are in close, end-to-end relationship to a faster moving second conveyor so as to achieve a controlled spacing between the blanks. This is in direct contrast to the objective of *Frank* which is to transfer an individual glass sheet from a slower moving furnace conveyor to a faster moving cooling conveyor as quickly as possible to increase the overall number of glass sheets through the treatment process.

Accordingly, independent method claims 1 and 9 have been amended to require dispensing a plurality of blanks from a feeder onto a first conveyor and then accelerating the first conveyor, with the plurality of blanks thereon, to substantially match a faster velocity of a second conveyor. This clearly distinguishes from *Frank* in view of § 102 as well as § 103. Specifically, not only does *Frank* fail to disclose or suggest dispensing a plurality of blanks or other objects onto a first conveyor and then accelerating the first conveyor, with the plurality of blanks thereon, to a second faster velocity, any modification of *Frank* to provide for such plurality of glass sheets (if it could even be done), is completely contradictory to the disclosure and objectives of *Frank*. Thus, there is absolutely no motivation disclosed in *Frank* for any such modification. Accordingly, independent method claims 1 and 9 are clearly patentable over *Frank*.

The various secondary references fail to disclose features which would overcome this deficiency of *Frank*. Even if they did, their combination with *Frank* would not be proper for the reasons mentioned above. Specifically, to modify *Frank* in any way that would contemplate a

plurality of glass sheets on the roller section 273 would be completely contradictory to the disclosure and objectives of *Frank* and thus not obvious.

Claim 1 has been further amended to incorporate the limitations of original dependent claim 4 and a portion of original dependent claim 6 by requiring the step of detecting the position of one of said plurality of blanks, accelerating the first conveyor when said one blank is at a preselected position and reducing the velocity in the first conveyor after a predetermined period of time.

Method claim 9 has been further amended by requiring the step of decelerating the first conveyor after a predetermined period of time.

Independent apparatus claim 16 has been amended by requiring a feed conveyor operatively coupled with the feeder hopper and capable of receiving a plurality of blanks dispensed from the feeder hopper and a blank detector to detect the position of a given blank of a plurality of blanks on the feeder conveyor. For the same reasons as discussed above, this requirement of a plurality of blanks is not shown in *Frank* and any modification of *Frank* to include such a feature would be contradictory to the disclosure and objectives of *Frank* and thus not obvious.

Accordingly, for all of the above reasons, and particularly in view of the discussion of the prior art, the amendments to the claims and the distinctions between the prior art and such claims, it is submitted that the present claims are in condition for allowance. Such action is respectfully requested. If a telephone call would serve to expedite the prosecution of this application or answer any questions, the Examiner is respectfully requested to telephone the Undersigned.

Respectfully submitted,
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